

Amendments To The Claims:

Please amend the claims as shown.

1 – 6 (canceled)

7. (new) A method for cleaning a component by a plasma, comprising:  
arranging the component in a chamber having a chamber pressure and an electrode, where the component has a crack that initiates from a surface of the component and the component is arranged at a distance from the electrode as a function a depth of the crack;  
initiating the plasma via the electrode within the chamber; and  
varying  
the distance from the electrode to the component while not varying the chamber pressure, or  
the chamber pressure while not varying the distance from the electrode to the component, or  
both the distance from the electrode to the component and the chamber pressure such that a product of the chamber pressure and the distance from the electrode to the component is not varied.

8. (new) The method as claimed in claim 7, wherein the distance from the electrode to the surface of the component is continuously reduced to clean the crack of the component.

9. (new) The method as claimed in claim 7, wherein the chamber pressure is continuously reduced to clean the crack of the component.

10. (new) The method as claimed in claim 7, wherein the chamber is supplied with a reactive gas that reacts with a product to be removed from the crack of the component.

11. (new) The method as claimed in claim 7, wherein the component is selected from the group consisting of: a turbine blade, a turbine vane, a combustion chamber wall and a gas turbine housing.

12. (new) The method as claimed in claim 11, wherein the component is a used part to be refurbished.
13. (new) The method as claimed in claim 7, wherein the chamber pressure is less than an ambient pressure surrounding the chamber.
14. (new) The method as claimed in claim 7, wherein the chamber pressure and the distance from the electrode to the component is controlled such that the plasma is maintained.
15. (new) A turbine component crack cleaning system, comprising:
  - a vacuum chamber having an interior portion and a chamber pressure that contains the component to be cleaned; and
  - an electrode that produces a plasma for cleaning the crack arranged in the interior portion of the chamber where the distance from the electrode to the component is a function of the depth of the crack in the component, and is configured to vary
    - the distance from the electrode to the component while not varying the chamber pressure to maintain the plasma during cleaning, or
    - the chamber pressure while not varying the distance from the electrode to the component to maintain the plasma during cleaning, or
    - both the distance from the electrode to the component and the chamber pressure such that the product of the chamber pressure and the distance of the electrode to the component is constant to maintain the plasma during cleaning.
16. (new) The system as claimed in claim 15, wherein the distance from the electrode to the component is continuously reduced to clean the crack of the component.
17. (new) The system as claimed in claim 15, wherein the chamber pressure is continuously reduced to clean the crack.

18. (new) The system as claimed in claim 15, wherein the chamber is supplied with a reactive gas that reacts with a product to be removed from the crack of the component